



PATENT  
Customer No. 58,982  
Attorney Docket No. 08350.3304-04000  
Client Ref. No. 03-304.4

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: )  
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Thomas J. KELLY et al. ) Group Art Unit: 3661  
 )  
Application No.: 10/646,685 ) Examiner: Broadhead, Brian J.  
 )  
Filed: August 25, 2003 )  
 )  
For: SYSTEMS AND METHODS FOR ) Confirmation No.: 9970  
 )  
PROVIDING PROXY CONTROL )  
 )  
FUNCTIONS IN A WORK )  
 )  
MACHINE )

**Mail Stop AF**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Applicant requests a pre-appeal brief review of the rejections set forth in the final Office Action mailed February 6, 2007 ("Office Action"). Applicant respectfully asserts that (1) the application has been at least twice rejected; (2) this request is being filed concurrently with a Notice of Appeal; (3) this request is being filed prior to an Appeal Brief; and (4) this request is five or less pages in length, all in accordance with the guidelines set forth in the Official Gazette Notice of July 12, 2005. Applicant requests the prompt review of the Examiner's rejections set forth in the final Office Action.

**Section 112, First Paragraph Rejection**

In the Office Action, claims 30 and 31 were rejected under 35 U.S.C. § 112, first paragraph as failing to comply with the written description requirement. Particularly, the Examiner states that "there is no support for the first module being present and the first gateway intercepting the first message. The specification consistently discloses the

invention as replacing the modules and it never discloses that the proxy logic and destination modules that the proxy logic represents are present at the same time."

Office Action at 2. Applicant respectfully disagrees with this assertion and the Examiner's characterization of the specification. The specification states:

Gateway 715 may examine the destination address to determine whether the message is destined for a module in work machine 710 or if it can be processed by proxy logic included in gateway 715 ... [I]f the received message is not destined for local processing (Step 820--No), gateway 715 may forward or re-route the message (e.g., by consulting map 510) to another work machine or external system (Step 830) ... [I]f gateway 715 determines that the received message can be locally processed (Step 820--Yes), then gateway 715 may ... route the message to the appropriate control logic (Step 860). For example, gateway 715 may determine that the received message is destined for an EVIM module and may, therefore, route the message to EVIM proxy logic 540. In this fashion, the source module may be unaware of the fact that gateway 715 is acting as a proxy for the destination module. That is, external systems may transmit a message destined to a particular destination module within a work machine, and gateway 715 may (transparent to the source) intercept the message and process it via appropriate proxy logic . . .

Specification ¶¶ 0059 - 0060. Further, Fig. 7 shows that gateway 715 and destination module(s) 711 may be present together within work machine 700. Therefore, contrary to the Examiner's assertion, there is support for "the first module being present and the first gateway intercepting the first message," and for the "proxy logic and destination modules that the proxy logic represents [to be] present at the same time." Office Action at 2. Applicant respectfully requests reconsideration of the § 112 rejection.

### **Section 103 Rejections**

In the Office Action, claims 1-6, 8-25, 27-29, and 32-35 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 6,728,603 to Pruzan et al. ("Pruzan") in view of U.S. Patent No. 6,865,460 to Bray et al. ("Bray"). Claims 30, 31, 36 and 37 were rejected over Pruzan in view of U.S. Patent Application Publication No. 2004/0225740 to Klemba et al. ("Klemba"). Claim 38 was rejected over Pruzan and Bray, and further in view of U.S. Patent Application Publication No. 2003/0014521 to Elson et al. ("Elson").

Independent claim 1 recites a method for providing proxy services comprising, among other things, "routing, based on the destination address and an address map including proxy logic identifiers, the first message to a proxy logic element in the gateway that performs functions associated with the destination module based on data included in the first message." Contrary to the Examiner's assertion, Pruzan does not disclose this feature. Pruzan mentions that a computer 70 may emulate functions of a node on a bus 24, such as performing address configurations, responding to state of health inquiries, and generating messages to defend an address on bus 24. Pruzan col. 9, ll.10-11. The ability to emulate functions of a node on bus 24, however, is different than "routing, based on the destination address and an address map including proxy logic identifiers, the first message to a proxy logic element in the gateway that performs functions associated with the destination module based on data included in the first message," as required by claim 1. Pruzan merely discloses that computer 70 can emulate certain functions of a node on bus 24, nothing more. Pruzan, col. 9, ll. 10-22. There is no teaching that the emulation feature further involves routing a message to proxy logic that performs functions associated a destination modules based on information contained in the message. Thus, the Examiner makes an unwarranted assumption about the functionality of the emulation feature. Independent claims 8, 10-12, 19, 27-29 and 38, although slightly different in scope, each contain similar limitations and thus define over Pruzan for the same reasons as claim 1.

Additionally, neither Bray nor Elson remedy the deficiencies of Pruzan, nor does the Examiner allege this. For these reasons, Applicant respectfully requests the withdrawal of the § 103 rejection and the timely allowance of claims 1, 8, 10-12, 19, 27-29, and 38. Since claims 2-6, 9, 13-18 and 20-25 depend from claims 1, 8, 12, and 19, Applicant respectfully requests the withdrawal of the § 103 rejection and the timely allowance of these claims.

Independent claims 32 and 34 also include limitations that distinguish from Pruzan. For example, claim 32 recites "[a] gateway including first program logic and second program logic serving as proxies for modules in the work machine ... routing, based on an address map and the information included in the message, the message from the first program logic to the second program logic; and performing, by the second

program logic, the operation on the data included in the message.” Similarly, claim 34 recites “[a] gateway comprising: . . . first program logic configured to perform functions associated with at least a first one of the modules; and second program logic configured to perform functions associated with at least a second one of the modules . . . and [routing], based on an address map and the information included in the message, the message from the first program logic to the second program logic, and wherein the second program logic is configured to perform the operation on the data included in the message.” As discussed above, Pruzan does not disclose such routing with respect to even a single logic element. Therefore, Pruzan cannot disclose subject matter recited in claims 32 and 34. The Examiner concludes that if two controllers 22 of Pruzan are emulated, computer 70 (performs the emulation) would somehow “[route], based on an address map and the information included in the message, the message from the first program logic to the second program logic,” and the second logic would “[perform] the operation on the data included in the message.” Office Action at 8-9. The Examiner makes an unwarranted assumption about the functionality of the emulation feature. Specifically, Pruzan does not disclose that computer 60 routes the messages to proxy logic elements based on an address map. Pruzan merely mentions that computer 70 can emulate certain functions of a node, nothing more. Pruzan, col. 9, ll. 10-22. Therefore, Applicant requests the withdrawal of the § 103 rejection and the timely allowance of claims 32 and 34. Since claims 33 and 35 depend from claims 32 and 34, respectively, Applicant requests the withdrawal of the § 103 rejection and the timely allowance of these claims also.

With respect to independent claims 30 and 36, the Examiner admits that Pruzan does not disclose “routing the message from a first gateway in a first machine to a second gateway in a second machine when the first gateway is unable to process the message,” and that “the second gateway [routes] the message from the second gateway when the second gateway is unable to process the message.” Office Action at 7. However, Klemba also fails to disclose these features. Klemba discloses a method of routing a message from an entry service point (SP) to a terminal service point in an ad-hoc network based on an entry SP internal IP address, an entry SP ID, a terminal SP internal IP address, and a terminal SP ID contained in the message header. Klemba ¶¶

0038, 0040-0041. However, Klemba does not teach that the first SP, or any intermediate SP in the ad-hoc network, makes determinations as to whether it is *unable to process the message*. In fact, Klemba is directed to an algorithm to efficiently route the message from the entry SP to the terminal SP along a concise and direct path through the network. Klemba, ¶¶ 0053-0055. Klemba states that "in order for the SPN to efficiently route traffic ... from Entry SP 605 to a Terminal SP 630, it fundamentally needs to know that the destination exists and how to get to it." Klemba, ¶ 0053. In other words, the SPs of Klemba simply route messages, based on the addresses and IDs contained in the message headers, *without determining whether each SP along the path is unable to process the message*. Klemba does not teach that the ability or inability of the SPs to process a message is a criterion considered by the routing algorithm. For these reasons, Applicant respectfully requests the withdrawal of the § 103 rejection and the timely allowance of claims 30 and 36, and their respective dependent claims 31 and 37.

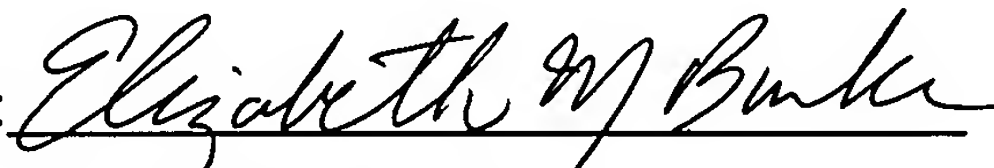
### **Conclusion**

For the foregoing reasons, Applicant submits that the § 103 rejections of claims 1-6, 8-25 and 27-38 include factual and legal deficiencies entitles Applicant to a pre-appeal brief review of the Final Office Action. Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account 06-0916.

Respectfully submitted,

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Dated: April 27, 2007

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